## (19) World Intellectual Property Organization

International Bureau



## I DESTA BUILDON IL GISTILO MORA GENA BENEL DAN I IN DIA BUILD SALAB MAN BUILD BUILD SID GOTTO MILO MON DOLL

(43) International Publication Date 14 July 2005 (14.07.2005)

**PCT** 

## (10) International Publication Number WO 2005/063464 A2

- (51) International Patent Classification<sup>7</sup>: **B29C 59/02**, 35/08, B32B 31/00, C09J 7/02, B29D 11/00
- (21) International Application Number:

PCT/BE2005/000001

- (22) International Filing Date: 3 January 2005 (03.01.2005)
- (25) Filing Language:

English

(26) Publication Language:

English

- (30) Priority Data: 03079017.4 29 December 2003 (29.12.2003) EI
- (71) Applicant (for all designated States except US): MACTAC EUROPE S.A. [BE/BE]; Boulevard Kennedy, B-7060 Soignies (BE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): STOCQ, Robert, Ghislain [BE/BE]; Rue de Valenciennes 69, B-7320 Bernissart (BE).
- (74) Agents: SCHMITZ, Yvon et al.; Gevers & Vander Haeghen, Holidaystraat 5, B-1831 Diegem (BE).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG).

## Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF FORMING A THREE-DIMENSIONAL MICROSTRUCTURE ON A SURFACE, USES THEREOF, AND MICROSTRUCTURED PRODUCTS SO OBTAINED

(57) Abstract: Method of forming a three-dimensional microstructure on a surface, uses thereof, and microstructured products so obtained A method of forming a three-dimensional microstructure on a flat surface of a support, comprising the application of a first flat and uniform layer of silicone on said surface of support and the application on the first layer of silicone of a second three dimensionally microstructured layer of silicone, said first layer and second layer of silicone become integrally connected to thus form a common three-dimensional microstructure ensuring anti-adhesive properties distributed regularly on the surface of the support, so that any flexible surface of substrate, in particular a surface of adhesive deposited on said layers of silicone will be microstructured by inverse replication of the three-dimensional microstructure formed by the two layers of silicone, where said layers of silicone are fixed by hardening by heating or by exposure to an ultraviolet or electronic radiation, or a combination thereof, applications thereof and films, notably self-adhesive films, such as those microstructured by said method.